

22.1/22.2 Review

Grade: 9th
Subject: Earth Science
Date: 3/13/13

Mar 13-10:27 AM

1 What are the two highest layers in the atmosphere?

- A troposphere, mesosphere
- ☒ B thermosphere, mesosphere
- C stratosphere, thermosphere
- D troposphere, stratosphere

Mar 13-10:29 AM

2 Auroras are caused by electrically charged particles in the ...

- A mesosphere
- B troposphere
- C hemisphere
- D ionosphere

Mar 13-10:31 AM

3 The layer of the atmosphere that has layered gases, thin air, and little moisture is the _____.

Stratosphere

Mar 13-10:31 AM

- 4 The layer in the atmosphere that is the coldest layer, temperature decreases as altitude increases is the _____.

mesosphere

Mar 13-10:32 AM

- 5 The layer in the atmosphere that lacks particle density and has little thermal energy transfer is the _____.

thermosphere

Mar 13-10:33 AM

- 6 The _____ is the layer of the atmosphere that is the densest layer and contains almost 90% of the atmosphere's mass.

troposphere

Mar 13-10:34 AM

- 7 Which answer best describes Earth's atmosphere?

- A mostly oxygen with 21% nitrogen
- B mostly nitrogen with 21% oxygen
- C mostly carbon dioxide with about 21% oxygen
- D mostly nitrogen with about 21% carbon dioxide

Mar 13-10:35 AM

8 What causes differences in air temperatures at different altitudes?

- A mainly the way the air radiates solar energy
- B mainly the way gases radiate light
- C mainly the way gases absorb solar energy
- D mainly the way moisture moves through the atmosphere

Mar 13-10:36 AM

9 How much energy radiated by the sun reaches Earth?

- A about 80%
- B about 50%
- C about two-billionths
- D about one one-hundredth

Mar 14-8:54 AM

10 Energy transferred as electromagnetic waves is called...

- A thermal conduction
- B radiation
- C convection
- D convection current

Mar 14-8:56 AM

11 Energy transferred by circulation of a liquid or gas is called...

- A thermal conduction
- B radiation
- C convection
- D convection current

Mar 14-8:57 AM

12 Thermal energy transferred by circulation of a liquid or gas is called...

- A thermal conduction
- B radiation
- C convection
- D convection current

Mar 14-8:59 AM

13 The process by which gases in the atmosphere absorb thermal energy and radiate it back to earth is called...

- A the thermal effect
- B the greenhouse effect
- C global warming
- D radiation balance

Mar 14-9:01 AM

14 When the amount of energy received from the sun and the amount of energy returned to space are about equal, it is called...

- A seasonal equality
- B radiation balance
- C solar reradiation
- D global warming

Mar 14-9:02 AM

15 One reason for global warming may be....

- A decreasing global gases
- B increasing global gases
- C increasing greenhouse gases
- D decreasing greenhouse gases

Mar 14-9:02 AM

Chapter 22 Review

Grade: 9th
Subject: Earth Science
Date: 3/15/13

Mar 14-8:53 AM

- 1 The curving of the path of a moving object from an otherwise straight path due to Earth's rotation is known as the Coriolis effect.

Mar 14-4:41 PM

- 2 Trade winds are prevailing winds that blow from east to west from 30 degrees latitude to the equator in both hemispheres.

Mar 14-4:42 PM

- 3 Westerlies are prevailing winds that blow from west to east between 30 and 60 degrees latitude in both hemispheres.

True
False

Mar 14-4:42 PM

- 4 Polar Easterlies are prevailing winds that blow from east to west between 60 and 90 degrees latitude in both hemispheres.



Mar 14-4:43 PM

- 5 The three looping patterns of air flow that exist in each hemisphere are known as _____.

convection cells



Mar 14-4:44 PM

6 The narrow bands of high-speed winds that blow in the upper atmosphere are called...

- A trade winds
- B convection cells
- C horse latitudes
- ☒ D jet streams

Mar 14-4:45 PM

7 Local winds are influenced by local conditions and local

- A season
- B air quality
- ☒ C temperature
- D time zone

Mar 14-4:46 PM

8 Winds that extend over distances of less than 100 km are ...

- A gales
- B storms
- C light air
- ☒ D breezes

Mar 14-4:47 PM

9 The trade winds of the Northern and Southern Hemisphere meet at the equator in a narrow zone of weak variable winds called....

- ☒ A the doldrums
- B the wind belt
- C subtropical jet streams
- D prevailing winds

Mar 14-4:48 PM

10 What kind of wind blows cool air from land to water?

- A sea breeze
- B mountain breeze
- ☒ C land breeze
- D valley breeze

Mar 14-4:48 PM

11 During one part of the nitrogen cycle, nitrogen is removed from the air mainly by nitrogen-fixing....

- ☒ A bacteria
- B waves
- C minerals
- D crystals

Mar 18-12:38 PM

12 The atmosphere contains tiny solid particles called...

- A gases
- ☒ B particulates
- C meteors
- D nitrogen

Mar 18-5:20 PM

13 A barometer measures...

- ☒ A atmospheric pressure
- B wind speed
- C ozone concentration
- D wavelengths

Mar 18-5:21 PM

14 Almost all of the water and carbon dioxide in the atmosphere is in the...

- A exosphere
- B ionosphere
- ☒ C troposphere
- D stratosphere

Mar 18-5:21 PM

15 The process by which the atmosphere slows Earth's loss of heat to space is called the...

- ☒ A greenhouse effect
- B Coriolis effect
- C doldrums
- D convection cell

Mar 18-5:22 PM

16 Energy as heat can be transferred within the atmosphere in three ways- radiation, conduction, and...

Convection

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Mar 18-5:23 PM

17 A vertical looping pattern of airflow is known as a...

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Mar 18-5:24 PM

18 A gentle wind that covers less than 100 km is called ...

- A a jet stream
- B the doldrums
- ☒ C a breeze
- D a trade wind

Mar 18-5:26 PM

19 Which of the following layers of the atmosphere is closest to the ground?

- ☒ A troposphere
- B thermosphere
- C mesosphere
- D exosphere

Mar 18-5:27 PM

20 Which of the following layers of the atmosphere is closest to space?

- A troposphere
- B ionosphere
- C mesosphere
- D exosphere

Mar 18-5:29 PM

21 The three main elemental gases in the atmosphere are: nitrogen, oxygen, and....

Argon

Mar 18-5:29 PM

22 Maximum local wind speeds for each of the last seven days were 12 km/h, 20 km/h, 11 km/h, 6 km/h, 8 km/h, 19 km/h, and 17 km/h. What is the average wind speed (in km/h)?

$$\frac{12 + 20 + 11 + 6 + 8 + 19 + 17}{7}$$

$$\underline{13.3}$$

Mar 18-5:31 PM